

## TWO PHILADELPHUS COMBINATIONS.

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THE well-known and loved fragrant shrub of every old-fashioned garden, the Common Syringa or Mock Orange, is a native of the Caucasus and Armenia and possibly of Europe, where it is at least thoroughly naturalized in some localities. It is very variable and easily passes by imperceptible gradations into a number of wild and horticultural varieties, most of which are cultivated in New England. One of the best known of these has commonly been called *P. satsumi* Sieb.,<sup>1</sup> but the original account of the supposed species thus named is a hopeless mixture of references to Japanese and American plants of quite different groups. The group including the American element is confined to the Western Hemisphere, in fact, the particular subgroup intended to the Southern States. It is thus a name which is a "permanent source of confusion and error."

*P. satsumanus* Sieb., according to Miq.,<sup>2</sup> and *P. coronarius* L. var. *satsumi* (Sieb.) Maxim.<sup>3</sup> are both based on *P. satsumi*. It is true that Rehder<sup>4</sup> attempts to rescue the name *P. satsumanus* by arguing that it is the first one whose description clearly applies to our plant, but the first synonym cited under it is *P. satsumi* Sieb., hence the author's purpose was evidently to replace the latter name by the name *P. satsumanus*. This intention to regard both names as equivalent is made yet clearer, not only by the obvious derivation of one from the other, but by the citation of Siebold as the authority for both. More than that, the new form of the name is plainly supposed to be an improvement on a native word by Latinization.

Whatever *P. satsumi* is, then, *P. satsumanus* is also, and, if, as is here true, *P. satsumi* is undeterminable, it logically follows that *P. satsumanus* ought to be discarded with it. Beyond the manifest intention of Miquel, we have neither right nor motive to go. The horticultural name *P. Yokohama* or *Yokohamae* is no better understood, for it also has been applied variously to our plant and to an ill-

<sup>1</sup> Fl. Gard. ii, 102 (1851-2).

<sup>2</sup> Ann. Mus. Bot. Lugd. Bat. iii, 99 (1867).

<sup>3</sup> Mém. Acad. Impér. Sci. St. Pétersb. ser. 7, no. 16, 40 (Feb. 9, 1867).

<sup>4</sup> Mitt. Deutsch. Dendrol. Gesellsch. 249-250 (1910).



defined phase of *P. Gordonianus*,<sup>1</sup> an American plant — surely a strange confusion.

Fortunately, there is an available name for our plant, which is a Chinese and Japanese variety having more acuminate leaves than the type, with conspicuous indurated teeth or serrations, evenly and rather distantly disposed, the long-acuminate tip often bent to one side, especially in wild specimens. Lange<sup>2</sup> describes a *P. acuminatus*. Koehne<sup>3</sup> cannot distinguish it from the plant currently known as *P. satsumi*. Schneider<sup>4</sup> also says that it is perhaps identical with *P. satsumi*, as usually interpreted. Authentic material together with Lange's figure seem to leave no doubt about this identity.

Our plant can hereafter be correctly known, therefore, as: *PHILADELPHUS CORONARIUS* L. var. **acuminatus** (Lge.) A. H. Moore, n. comb.

*P. acuminatus* Lge. Fortegn. Veterin. Landb. Forsthav. Charlottenl. Frilandst. 65 (1871); Bot. Tidsskr. ser. 3, ii, 131, pl. 2 (1877-9).

*P. satsumi* and *satsumanus* of authors.

*P. coronarius* L. var. *tomentosus* (Wall.) Hook. f. & Thoms.<sup>5</sup> is another variety of the old polymorphous species, this time, a Himalayan and Tibetan one. A specimen has been examined with the note, "Well established on rocky knoll near site of old greenhouse, Arlington, Mass.," which, while exhibiting some peculiarities, does not seem possible to refer elsewhere. The variety just mentioned is very hairy on the lower leaf-surfaces.

There are likewise several closely related species approaching the type or one of the varieties, which make the group a puzzling one.

In our Southern States one of the finest of the sweet-scented species is native, namely, *P. pubescens* Lois.<sup>6</sup> This species usually has longer racemes and handsomer foliage than *P. coronarius*, though the fragrance is not quite so strong or lasting. There is only one 'Mock Orange.'

<sup>1</sup> Presumably *P. Gordonianus* Lindl. Bot. Reg. xxiv, Misc. Notes, no. 21 (1838); xxv, pl. 32 (1839) = *P. Lewisii* Pursh, Fl. Am. Sept. i, 329 (1814).

<sup>2</sup> Fortegn. Veterin. Landb. Forsthav. Charlottenl. Frilandst. 65 (1871); Bot. Tidsskr. ser. 3, ii, 131, pl. 2 (1877-9).

<sup>3</sup> Deutsch. Dendrol. i, 180 (1893).

<sup>4</sup> Ill. Handb. Laubholzk. i, 371 (Feb. 2, 1905).

<sup>5</sup> Jour. Proc. Linn. Soc. (Bot.) ii, 83 (1858), *P. tomentosus* Wall. ex G. Don, Gen. Hist. Dichlam. Pl. ii, 807 (1832).

<sup>6</sup> Herb. Gén. Amat. iv, 268 (1820); *P. grandiflorus* P. W. Wats. Dendrol. Brit. i, pl. 46, 1825, not Willd.; *P. latifolius* Schrad. ex DC. Prod. Syst. Nat. Regn. Veg. iii, 206 (1828).



The leaves, the calyx, externally as well as internally, and the capsules are markedly pubescent.

Beadle<sup>1</sup> describes from Tennessee as a species, *P. intectus*, but it is only a variety which has the leaves, capsules, and outer surface of the sepals glabrous or relatively so.<sup>2</sup>

*P. PUBESCENS* Lois. var. **intectus** (Beadle) A. H. Moore, n. comb.

*P. intectus* Beadle, Bilt. Bot. Studies, i, 160 (1902).

The differences are thus comparable to those between *P. coronarius* and its variety, *tomentosus*, above.

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## THE AMERICAN VARIATIONS OF LYCOPODIUM ANNOTINUM.

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THE disposition of the American plants ordinarily passing as *Lycopodium annotinum* L. has often been a source of some perplexity to students in our Northern States and British America. As commonly interpreted the species consists with us of the so-called typical *L. annotinum*, with leaves spreading, and var. *pungens* Desv., with shorter more rigid erectish leaves. The chief difficulties which field-botanists in the North have encountered have arisen from the fact that in the region from Newfoundland to the Great Lakes and eastern Pennsylvania there are two quite pronounced variations of *L. annotinum* with spreading or even reflexed leaves. A study of the material in the Gray Herbarium and the Herbarium of the New England Botanical Club, 184 numbers, shows that the species in North America falls into four, instead of two, rather pronounced tendencies, the typical form of the species crossing the continent, the three varieties each with more restricted distribution. The following synopsis may be of interest to others as a basis for the recognition of these four variations.

<sup>1</sup> Bilt. Bot. Studies, i, 160 (1912).

<sup>2</sup> Indeed, Beadle, l. c., says of it: "From *P. latifolius* Schrad. this species may be recognized by the glabrous or glabrate leaves and by the absence of pubescence on the hypanthium and exterior surface of the sepals."